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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,015	04/11/2005	Lorenzo Farone	1340-12	7682
23117 7590 06/28/2010 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
BRYANT, MICHAEL C				
ART UNIT		PAPER NUMBER		
2884				
MAIL DATE		DELIVERY MODE		
06/28/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No. 10/507,015	Applicant(s) FARAONE ET AL.
Examiner CASEY BRYANT	Art Unit 2884

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 June 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
 Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 26-35 and 61-63.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

/David P. Porta/
 Supervisory Patent Examiner, Art Unit 2884

Continuation of 11, does NOT place the application in condition for allowance because: the Applicant's arguments have been fully considered and are not persuasive.

Applicant argues that the rejection under 35 USC 102(e) over Tayebati (US Pat. 6438149) of the independent claims is improper. Specifically, Applicant argues that the resultant stress in the membrane 37 is not substantially zero. While the Examiner admits that a stress is introduced in the manufacturing process which creates the membrane curvature (col. 7, lines 1-25), the stress is introduced exclusively during the formation process, in which the temperature and voltage conditions are carefully modified. Such conditions are not present in the device's normal operating environment. As the temperature is relaxed, the stresses in the membrane equalize but the membrane comprises a curved geometry. And as stated in the reply filed 12/31/2009, the stresses must equate to substantially zero or the curvature in the membrane would continue to increase as in the formation process, eventually leading to mechanical breakdown.

Even if the resultant stress in the membrane is assumed to not be substantially zero, Tayebati teaches that it is known in the art to for a planar tunable filter in the instant device. Furthermore, Tayebati teaches that the significant difference between the curved and planar structures is in the manufacturing of the membrane and DBR layers as referenced above (col. 6, lines 60-67). That is, a planar membrane and DBR layer can be formed if the induced stresses of the curvature design are not introduced during manufacturing, and the resultant stress remains substantially zero through the entire process.

Applicant argues that the combination of Tayebati with Sirbu uses impermissible hindsight. In response to applicant's argument, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The looked upon reference, Sirbu, teaches it is known in the art to form a planar DBR layer in a tunable cavity resonator (Fig. 3). Tayebati also suggests such an arrangement (col. 6, lines 60-67). The curved arrangement of Tayebati is designed to focus the light. If the incident light is predetermined to not need focusing, then one of ordinary skill in the art would be motivated to use a planar arrangement as the prior art teaches.

Applicant argues the combination of Tayebati with Sirbu would render the device of Tayebati unsatisfactory for its intended purpose. The intended purpose of Tayebati is to provide a tunable cavity resonator. The prior art teaches a tunable cavity resonator having a planar membrane and DBR layer. The arrangement is capable of operating in the same way as intended.